

### **REMARKS**

Claims 1, 3, 5, 9, and 12-14 are pending in this application. Claims 2, 15, 30 and 31 have been cancelled herein. Claims 1-2, and 5 have been amended to more particularly and distinctly claim that which Applicants regard as their invention. In particular, Claims 1 and 5 have been amended to replace “pre-selected A chain integrity” with “high A $\alpha$ -chain integrity,” as describing the obtained fibrinogen. Support for this amendment can be found, for example, at page 35, lines 10-12 and page 36, line 10 to page 37, line 7. Claim 1 has been further amended by combining the features of claim 2, now cancelled, with claim 1. Claim 5 is further amended to replace the word “fluid” with “milk derived from a transgenic mammal”, a feature previously set forth in claim 31, now cancelled. Claim 14 has been amended to correct an inadvertent error introduced in prior amendments.

#### **Response to Claim Rejections Under 35 U. S. C. § 101**

The rejection of claim 30 is moot in view of the cancellation of that claim.

#### **Response to Claim Rejections Under 35 U. S. C. § 102**

Claim 5 has been rejected as allegedly anticipated by Vukovich *et al.* (1980) or Lord (US 6,037,457). The amendments made to claim 5 render the rejection moot. Vukovich *et al.* does not teach a method for obtaining fibrinogen having a high A $\alpha$ -chain integrity from milk derived from a transgenic mammal. Likewise, Lord does not teach a method for obtaining fibrinogen having a high A $\alpha$ -chain integrity in milk derived from a transgenic mammal. Claim 5 as amended is not anticipated by Vukovich *et al.* or Lord

#### **Response to Claim Rejections Under 35 U. S. C. § 103**

Claims 1-3, 5-9, 12-15 and 30-31 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Garner *et al.* (US 5,639,940) in view of Tripodi (WO 9213495) and further in view of Vukovich *et al.* (1980) and Lord. The Examiner alleges that Garner *et al.*, when combined with the secondary references, teaches an obvious method in which precipitation is performed in the presence of  $\epsilon$ -aminocaproic acid and the use of a HIC step.

Applicants will respond to the rejection as applied to the remaining claims, 1, 3, 5, 9, and 12-14.

The method of the claimed invention results in fibrinogen with high A $\alpha$ -chain integrity. None of the references teach or suggest obtaining a fibrinogen with high A $\alpha$ -chain integrity. Indeed, the term does not even appear in any of the references, and the references do not recognize the advantage secured by the present invention in maintaining A $\alpha$ -chain integrity. Further, claim 1 now defines a fibrinogen purification method which comprises steps a, b, c, and d. The method is not taught or suggested by any of the prior art when considered alone or in combination.

None of the references, alone or taken in combination, disclose that obtaining a fibrinogen with high A $\alpha$ -chain integrity is an effect to be expected. None of the references advert to the fact that this may even be a desirable effect.

Applicants respectfully submit that it would not have been obvious for a person of ordinary skill in the art to combine the references as the Examiner indicates. Even if they were combined, the ability of the method to purify fibrinogen to a high A $\alpha$ -chain integrity would not be a foreseeable result. Thus, the subject matter of claim 1 and claim 5 is inventive over the prior art, even if the references were combined.

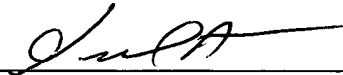
For all the afore-mentioned reasons, Applicants respectfully submit that the combination of Garner *et al.* with any of the secondary references, even if properly made, which is not admitted, would not teach or suggest the multi-step method as claimed.

Reconsideration and withdrawal of the Section 103 rejection is respectfully requested.

**Conclusion**

Applicants respectfully submit that all pending claims are in condition for allowance. An early action toward allowance is earnestly solicited. The Examiner is invited and encouraged to contact the undersigned attorney of record if such contact will advance examination and allowance of the application.

Respectfully submitted,  
GRAHAM McCREATH, et al.

By:   
DANIEL A. MONACO  
Reg. No. 30,480  
Drinker Biddle & Reath LLP  
One Logan Square  
18<sup>th</sup> and Cherry Streets  
Philadelphia, PA 19103-6996  
Tel. (215) 988-3312  
Fax. (215) 988-2757  
Attorney for Applicants